

CLAIMS

1. A guide mechanism for a cover of a movable vehicle roof, comprising
at least one slotted guide coupled to the cover and movable between a raised position, an initial position, and a lowered position, wherein said at least one slotted guide causes the cover to move vertically, the slotted guide having a first locking portion; and
at least one profiled rail that shifts the slotted guide horizontally together with the cover along the profiled rail, the profiled rail having a second locking portion,
wherein the first and second locking portions engage with each other to lock the slotted guide with the profiled rail with a positive fit when the slotted guide is in the raised position to prevent horizontal displacement of the slotted guide.
2. The guide mechanism as claimed in claim 1, wherein the first and second locking portions engage with each other to lock the slotted guide with the profiled rail with a positive fit when the slotted guide is in the initial position to prevent horizontal displacement of the slotted guide.
3. The guide mechanism as claimed in claim 1, wherein the first and second locking portions disengage to move the slotted guide out of locking engagement with the profiled rail when the slotted guide is in the lowered position.
4. The guide mechanism as claimed in claim 1, wherein the first and second locking portions are the sole structures in the guide mechanism for forming a locking engagement between the slotted guide and the profiled rail in the raised position to prevent horizontal rearward displacement of the slotted guide.
5. The guide mechanism as claimed in claim 1, wherein the first locking portion comprises at least one extension on the slotted guide and the second locking portion

comprises at least one recess in the profiled rail, wherein the extension and recess engage in locking engagement to prevent horizontal displacement of the slotted guide.

6. The guide mechanism as claimed in claim 5, further comprising a pivot bearing disposed at a front end of the slotted guide and wherein the extension is provided close to the front end.

7. The guide mechanism as claimed in claim 5, wherein the profiled rail has a C-shaped profile with upper converging webs, wherein at least one web has said at least one recess.

8. The guide mechanism as claimed in claim 5, wherein the extension enters the recess when the slotted guide is in the lowered position, and wherein the profiled rail prevents the extension from rising vertically after the slotted guide is displaced horizontally when in the lowered position.

9. The guide mechanism as claimed in claim 1, wherein the first locking portion comprises at least one recess in the slotted guide and the second locking portion comprises at least one extension on the profiled rail, wherein the extension and recess engage in locking engagement to prevent horizontal displacement of the slotted guide.

10. The guide mechanism as claimed in claim 1, further comprising:

a drain gutter disposed at a rear edge of the cover, wherein the drain gutter extends transversely with respect to the vehicle; and

a bearing part connected to the drain gutter and adapted to be shifted along the profiled rail,

wherein the bearing part and the drain gutter are decoupled from the slotted guide in the horizontal direction in the raised position.

11. The guide mechanism as claimed in claim 10, wherein, in the initial position and in the lowered position, the slotted guide engages the bearing part and is positively coupled thereto in the horizontal direction.

12. The guide mechanism as claimed in claim 11, further comprising a nose molded to a rear edge of the slotted guide, wherein the nose engages the bearing part.

13. A guide mechanism for a cover of a movable vehicle roof, comprising

at least one slotted guide coupled to the cover and movable between a raised position, an initial position, and a lowered position, wherein said at least one slotted guide causes the cover to move vertically, the slotted guide having a first locking portion;

at least one profiled rail that shifts the slotted guide horizontally together with the cover along the profiled rail, the profiled rail having a second locking portion,

wherein the first and second locking portions engage with each other to lock the slotted guide with the profiled rail with a positive fit when the slotted guide is in the raised position and in the initial position to prevent horizontal displacement of the slotted guide, and wherein the first and second locking portions disengage to move the slotted guide out of locking engagement with the profiled rail when the slotted guide is in the lowered position;

a drain gutter disposed at a rear edge of the cover, wherein the drain gutter extends transversely with respect to the vehicle; and

a bearing part connected to the drain gutter and adapted to be shifted along the profiled rail, wherein the bearing part and the drain gutter are decoupled from the slotted guide in the horizontal direction in the raised position.

14. The guide mechanism as claimed in claim 13, wherein the first and second locking portions are the sole structures in the guide mechanism for forming a locking engagement between the slotted guide and the profiled rail in the raised position to prevent horizontal rearward displacement of the slotted guide.

15. The guide mechanism as claimed in claim 13, wherein the first locking portion comprises at least one extension on the slotted guide and the second locking portion comprises at least one recess in the profiled rail, wherein the extension and recess engage in locking engagement to prevent horizontal displacement of the slotted guide.

16. The guide mechanism as claimed in claim 15, further comprising a pivot bearing disposed at a front end of the slotted guide has a pivot bearing and wherein the extension is provided close to the front end.

17. The guide mechanism as claimed in claim 15, wherein the extension enters the recess when the slotted guide is in the lowered position, and wherein the profiled rail prevents the extension from rising vertically after the slotted guide is displaced horizontally when in the lowered position.

18. The guide mechanism as claimed in claim 13, wherein the first locking portion comprises at least one recess in the slotted guide and the second locking portion comprises at least one extension on the profiled rail, wherein the extension and recess engage in locking engagement to prevent horizontal displacement of the slotted guide.

19. The guide mechanism as claimed in claim 13, further comprising a nose molded to a rear edge of the slotted guide, wherein, in the initial position and in the lowered position, the nose engages the bearing part to positively couple the slotted guide and the bearing part in the horizontal direction.